care of sweden
Supporting Life

User Manual

2015-09-15

CuroCell® AUTO420

Alternating pressure mattress

Item no. user manual: 95-001617

7 331345 047959

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IMPORTANT SAFETY INSTRUCTIONS

Read all instructions prior to use

WARNING! To minimise the risk of fire, electric shock or personal injury:

1. The product must only be used for its intended purpose as described in this manual. The product may not be combined, assembled or repaired with other parts (such as the pump and mattress), accessories or spare parts other than those described in this manual or other documentation from Care of Sweden.
2. Do not use the product in wet rooms or where there is a risk of the pump coming into contact with water or other liquids. Never handle a product that has come into contact with water/liquid. Pull the plug out of the electric socket immediately and send the product to an authorised service provider for service.
3. DO NOT USE in the vicinity of or in contact with naked flames or hot surfaces, such as fires, burning cigarettes or hot lamps. Although the product has undergone fire testing, it could become damaged if it comes into contact with naked flames.
4. The product must be placed and used so that it is not pinched or damaged.
   NB: Be particularly aware of pinching when using bed rails.
5. Never use the product if the pump power cord or plug is defective, the pump casing is damaged or the pump is not functioning properly. Contact a service provider for examination and repair.
6. Regularly check product functionality with a hand check (see section 4.4).
7. Continual monitoring is required when the product is used for individuals needing special supervision, such as children.
8. The mattress is protected by a hygiene cover; avoid combining the mattress with other fully covering plastic protectors. The cover's vapour permeability may be affected.
9. The hygiene cover does not allow liquid or air to penetrate, but is vapour permeable (vapour is wicked away). Make sure that the patient is positioned correctly to avoid the risk of suffocation.
10. Avoid damaging the hygiene cover when using sharp objects.
11. If the cover is equipped with side handles, these are for lifting the mattress. All other use takes place under your own liability and is not covered by the product warranty.

1. Introduction

CuroCell® air mattresses work according to the alternating pressure principle, a technique that is thoroughly tried and tested and has been used for a long time. Alternating pressure means that the pressure is alternated regularly between the cells in order to simulate the body's own movements. Periods are created in which the pressure is lower or completely absent. This provides good conditions for the skin to recover and to prevent injury.

Always read the user manual prior to use.

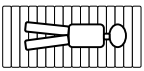
1.1 General information

This system is a medical device with CE marking in accordance with MDD 93/42/EEC. In accordance with Swedish Medical Products Agency (Läkemedelsverket) regulations in respect of medical devices, the manufacturer is obliged to report accidents and near-accidents. We would therefore be grateful if any accidents and near-accidents involving our products could be reported immediately to Care of Sweden. This system has been tested and approved according to the following standards: IEC 600601-1, IEC 60601-1-2, SS-EN ISO 12182, SS-EN ISO 14971, SS-EN ISO 10993, EN 597-1, EN 597-2, EN 14126.

1.2 Intended use

CuroCell® AUTO420 is an alternating pressure mattress that can be used in all types of medical environments to prevent and help treat pressure ulcers up to category 4(1). The mattress is intended to be used for people with a recommended minimum height of 120 cm and a recommended user weight of up to 250 kg. CuroCell® AUTO420 is a combi mattress placed directly on the bed base. We recommend changing position regularly. The time interval must be assessed by the attending personnel, depending on the user's status, diagnosis and general health.

The mattress should be used with the user lying in the lengthwise direction on the mattress with the user's feet positioned according to the instructions on the mattress.



The mattress must always be cleaned between users.

NOTE:

1. For certain users, such as amputees, the recommended height measurement may not be met. Users in these groups may, however, require other settings, as the entire surface is not under load. To check functionality, see sections 4.2, 4.3 and 4.4.
2. When used together with positioning pillows, read the pillow user manual carefully for correct positioning of the user.
3. Whenever this product is used with an evacuation sheet, it is the responsibility of the attending personnel to ensure that evacuation can be performed safely.
4. Be careful when using bed rails or other protection on the bed so that the mattress is not pinched or damaged.
5. The mattress must not be lifted with a person lying on it or used for any other type of transport other than necessary evacuation using an evacuation sheet.
6. The mattress is not suitable for use during X-ray examinations. This is because of the risk of image blurring and artefacts that may lead to diagnostic errors.

(1) National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers: Quick Reference Guide. Emily Haesler (Ed.). Cambridge Media: Osborne Park, Western Australia; 2014.

1.3 Other information

Action plan for pressure ulcers

For the best possible results when using this product, we recommend a structured and planned approach. Examples that can be applied to the use of our products can be found in the “Action plan for pressure ulcers” guidelines.

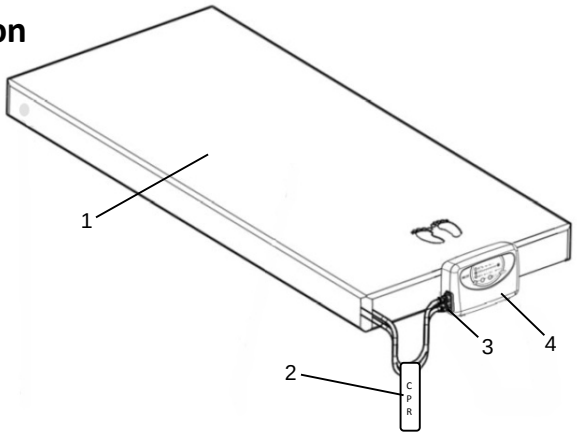
The Mattress Guide

This Guide provides guidance to personnel and prescribers when choosing a mattress from Care of Sweden. CuroCell® AUTO420 is a mattress in function group C. This information can be obtained from our website, www.careofsweden.se, or ordered from Customer Service (see contact information on the last page).

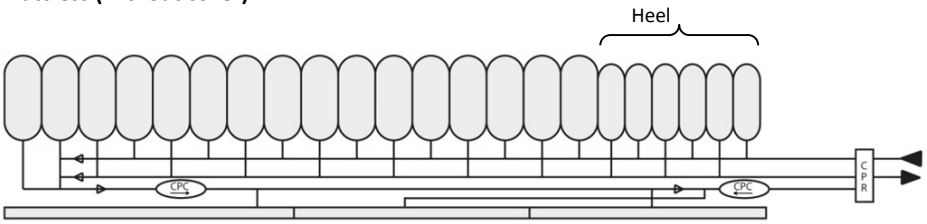
2. Product description

2.1 Pump and mattress

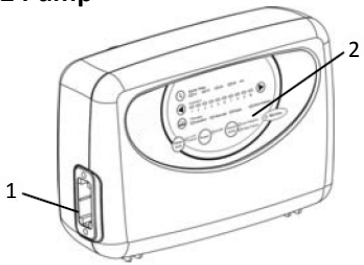
1. Mattress
2. CPR (Rapid deflation)
3. Pump connector
4. Pump



Mattress (without cover)

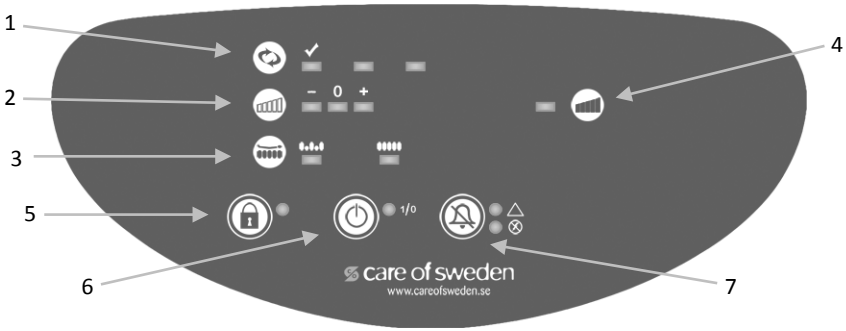


2.2 Pump



1. Tube connector
2. Control panel
3. Fuses (two)
4. Off/On (0/1)
5. Power cord connector
6. Hooks
7. Air filter

2.3 Pump functions – control panel



1. Automatic settings

This pump is equipped with a function that automatically sets the pressure based on the user's weight, posture and position. There are three ways to use this function.

1. The system adjusts the settings automatically when the system has been started.

2. Press the button and the system readjusts the automatic settings.

The system itself will start this function if any significant changes occur during use.

Status lights

1. All three lights lit – Automatic settings adjustment under way.

2. Only the light under the checkmark (left) is lit – The mattress is ready to use, normal mode.
3. The light on the right is lit – The pump will automatically adjust its settings within five minutes.

Once the settings have been automatically adjusted, the system will revert to the previously used programme. However, when started it will switch to alternating mode by default.

To stop the automatic setting adjustments, press the button.

2. Comfort setting
The pressure can be increased or decreased one level depending on the user's comfort requirements.

3. Programmes
Two programmes are available. Press the button to switch between programmes.
1. Alternating mode. Here, the pressure alternates between the cells.
2. Static mode. Here, the pressure will be same in all cells. This is also called "low pressure".

4. Maximum pressure (Nursing mode)
With this function, the entire mattress is inflated and provides firm support. This function automatically reverts to the previous setting after about 30 minutes. NOTE: The automatic settings are overridden when using this programme.

5. Panel lock
Press the Panel lock button to lock or unlock the panel. The green light is lit when the panel is locked. The panel locks automatically after five minutes of inactivity. This is to prevent the settings being changed inadvertently.

6. Power off/on
Turns the power to the control panel on or off. NOTE: Check that the power cord is properly connected and that the power switch on the side of the pump is in position 1 (on).

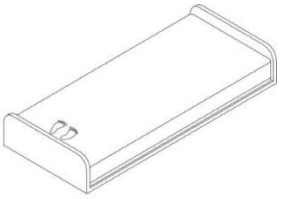
7. Alarm off
In the event of problems with alarms, see section 8 for troubleshooting.

A. Power supply alarm
If the pump loses power an audio/visual alarm is triggered. Turn off the alarm by pressing the Alarm off button.

B. Low pressure alarm
If the mattress pressure is too low an audio/visual alarm is triggered. Turn off the alarm by pressing the Alarm off button. It is reactivated after about five minutes if the pressure has not returned to normal.

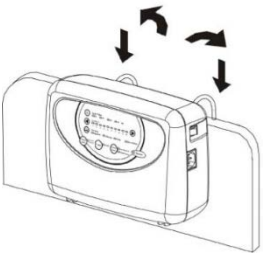
3. Assembly/Installation

When unpacking, check that no parts are damaged. If any damage is found, contact Care of Sweden before using the product.



1. Place the mattress on the bed base. Secure the mattress to the bed using the straps on the underside of the mattress.

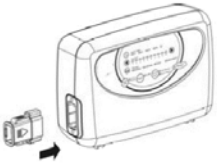
   Note:
   - Make up the bed with a sheet to improve user comfort.
   - Check that the CPR valve is closed.
   - If an adjustable bed is used, the mattress should be secured only to the moving parts of the bed.
   - Check the cells and push-buttons to ensure they are correctly assembled.



2. Hang the pump on the foot end of the bed or place the pump on a firm, level surface.

   Place the power cord in the cable holder by opening the fasteners, inserting the cable and closing the fasteners.

   If the cable holder is not used: Place the power cord so there is no risk of tripping over it, running over it with the bed wheels or pinching it when raising or lowering the bed.



3. Connect the air tubes from the mattress to the side of the pump. A click is heard or felt when they are correctly connected.

4. Check that the power switch on the side is set to 0 (off). Plug the power cord into an approved socket (220-240 V).

For 80/85/90x200/210

For 105/120x200/210

4. Operation

Note: Always read the user manual prior to use.

4.1 Start

1. Set the power switch on the side of the pump to 1 (on).
2. The mattress will start to inflate. It takes about 30 minutes to fully inflate the mattress.
3. You can start using the mattress when the top-left light is lit (only the light under the checkmark).

NOTE: Each time the systems starts up, it always begins by fully inflating the mattress and automatically adjusting the settings. See section 2.3 for more information. After automatically adjusting the settings, the system switches to alternating mode by default.

If necessary, the user may lie down on the mattress immediately without it being inflated. The undermattress bears the weight during the inflation phase. If the undermattress is an air-filled type, it must be fully inflated.

4.2 Programme selection

Two different programmes are available, alternating pressure and static low pressure. See section 2.3 for detailed information. We recommend alternating mode as the default setting.

There is another programme called Maximum Pressure. This function is used in conjunction with nursing duties, changing the user's position and getting the user in or out of the bed.

4.3 Comfort setting, fine-tuning

The air pressure in the mattress can be adjusted up to three levels.

NOTE: When only parts of the mattress are under load, such as in the case of amputees, it may be necessary to raise the setting using the comfort setting.

4.4 Hand check, checking the set pressure

The hand check is used to ensure that the mattress is working properly.

This must be performed regularly; we recommend once per shift.

Place a hand between the cells under the user's pelvic region. Check that the user doesn't "bottom out" and rest on the underlying mattress. We recommend a margin of one or two fingers.

If the margin is too small, initiate automatic settings adjustment. Wait ten minutes and perform a new hand check.

4.5 CPR

In case of an emergency where CPR (cardiopulmonary resuscitation) is necessary: Quickly pull the CPR strap then loosen the quick connectors on the side of the pump for the fastest possible deflation.

NOTE:
Make sure that the CPR strap is properly secured after use.

4.6 Alarms

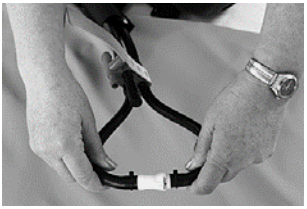
In the event of unusually low air pressure in the mattress, the light for the low pressure alarm lights and a buzzer sounds. See section 8 for troubleshooting.

Deactivate the alarm by pressing the Alarm off button on the pump control panel. If the problem is not resolved within about five minutes the alarm will be reactivated.

The pump is also equipped with a power loss alarm. If the pump loses power an audio/visual alarm is triggered. Turn off the alarm by pressing the Alarm off button.

WARNING!
If the air pressure remains low, search for damage to the mattress and the tubes. Repair when required or contact Care of Sweden or one of its authorised service providers.

4.7 Transport function



If the user needs to be moved in the bed the tubes can be connected together (detached from the pump). The mattress becomes static and is in so-called transport mode.

We recommend using this function for short periods only.

4.8 Heel function

The mattress has built-in heel relief. The last six cells at the foot end are designed to relieve sensitive heels.

5. Cleaning and reconditioning

It is important to follow the instructions below before the product is used for another user. Consult your hygiene manager or Care of Sweden for help and instructions if you are unsure.

5.1 Cleaning

PUMP

WARNING!

1. Do not open the pump housing – risk of electric shock. Service and maintenance must be performed by Care of Sweden or one of its authorised service providers.
2. Do not get the pump wet or submerge it in any liquid.

Wipe the pump clean with a damp cloth and mild detergent, such as washing-up liquid. If necessary, use an alcohol-based disinfectant/cleaner such as DAX surface cleaner or similar. Perform, Virkon or Desisoft can also be used. If using a different agent, choose one that does not affect the plastic of the pump housing.

MATTRESS COVER

The cover can be wiped clean with a mild detergent (such as washing-up liquid) and water or with an alcohol-based disinfectant/cleaner, such as DAX surface cleaner or similar. Perform, Virkon or Desisoft can also be used. Excrement and blood stains must be removed as soon as possible using cold water. Follow local instructions and detergent usage instructions carefully.

Multi-layer covers should be separated before washing. The parts should be washed with similar colours.

Chlorine and phenol-based cleaners could adversely affect the PU surface and should be avoided. If chlorine is used, we recommend a maximum concentration of 1%.

INNER COVER AND COMFORT FABRIC (accessories)

Clean the affected area using a mild cleaner (such as washing-up liquid) and water or an alcohol-based disinfectant/cleaner, such as DAX surface cleaner or similar. Perform, Virkon or Desisoft can also be used.

5.2 Reconditioning

PUMP

See section 5.1 for instructions.

MATTRESS

1. Disconnect the tubes from the pump and deflate the mattress. Also open the CPR valve.

2. Remove the cover. For more information on cleaning covers, see section 5.1.
3. Move the mattress to a clean area that is suitable for cleaning.
4. Wipe clean and disinfect the cells, all tubes and the CPR valve with an alcohol-based disinfectant/cleaner, such as DAX surface cleaner or similar. Perform, Virkon or Desisoft can also be used. Allow to dry.
   Note: The upper and lower layer of air cells can be divided using a quick connector, making it easier to clean the cells.
5. Wipe the work surfaces clean using a suitable detergent and/or disinfectant.
6. Put the mattress together. If the tubes have come loose from any of the cells, they must be reattached according to the illustration in section 2.1.

NOTE:
Check the hygiene cover each time the product is cleaned. If damaged, it must be replaced or repaired. Also check the pump, tube connectors and power cord during cleaning. Damaged parts must be replaced or repaired.

6. Storage

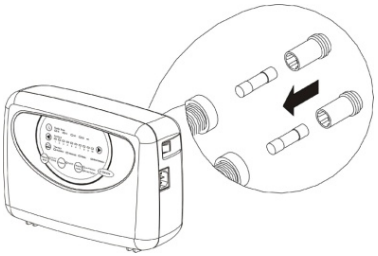
It is advisable to store the mattress and pump in the product bag (accessory). Handle the stored product with care. Do not place any heavy objects on top of it.

7. Maintenance

7.1 General

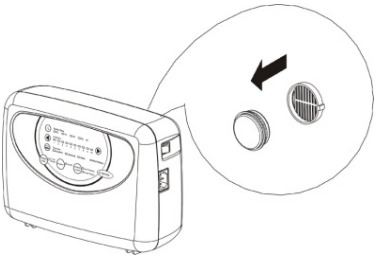
1. Check the power cord and plug for damage and scratches.
2. Check the mattress protection to make sure it is undamaged and that covers and cells are correctly assembled.
3. Check that the air flow alternates between the different outputs on the side of the pump.
4. Check that no tubes or connectors are damaged or pinched. Contact Care of Sweden if any spare parts are required.

7.2 Changing fuses



1. Remove the plug from the wall socket when replacing fuses.
2. Use a screwdriver to remove the fuse cover. Pull out the fuse holder.
3. Insert a new fuse of the same type (T1AL / 250 V) and screw the protective cover back into place. There are two fuses.

7.3 Changing the air filter



1. Loosen the small, round protective plate on the back of the pump.
2. Remove the filter from the holder.
3. Insert the new filter in the holder and replace the protective plate.

If the pump is used in a very dirty environment, the filter should be checked regularly.

8. Troubleshooting

Problem	Solution
Pump does not start	Check that the power cord is connected to a socket. Check the fuses.
Alarm triggered = mattress losing air	Check that the quick connectors for the tubes on the side of the pump are properly connected. Check that the CPR valve is closed. Open the mattress and check for any leaks from air cells or tubes. Check that all tube connectors are fine and properly connected.
User bottoms out	Check the mattress in accordance with “Alarm triggered” above. See sections 4.3 and 4.4 for more.
Mattress not stationary	Check that the mattress is secured to the bed base with the straps underneath (two at the head end and two on each of the long sides).
Some cells less inflated	This is normal if the alternating pressure programme is selected as the air supply alternates between cells every cycle (one cycle = ten minutes).
Noisy pump, vibrations can be felt	Check that the pump is correctly attached to the bed. Resonance may occur in parts of the bed. Remove the pump and listen to see whether there’s any difference. This can be resolved by placing the pump on a level surface. Or by putting, for instance, a towel between the pump and the bed.

If your questions are not answered by the above information, please contact Care of Sweden or one of its authorised service providers.

9. Technical description

9.1 Technical specification

PUMP		SPECIFICATION
Model		CuroCell® AUTO420
Voltage		220V-240 V, 50-60 Hz
Current		0.07 A
Fuse type		T1AL, 250 V
Cycle		10 min
Dimensions (LxWxH)		29.1 x 20 x 11.7 cm
Weight		2.2 kg
Ambient environment	Temperature	Operation: 10°C ~ 40°C
		Storage: -15°C ~50°C
		Shipping: -15°C ~70°C
	Humidity	Operation: 10% ~ 90% non-condensing
		Storage: 10% ~ 90% non-condensing
	Atmospheric pressure (or air pressure)	700 hPa-1060 hPa
Classification		Class II, Type BF, IP41
MATTRESS		SPECIFICATION
Model		CuroCell® AUTO420
Dimensions (WxLxH)		80/85/90/105/120x200/210x20 cm
Weight		11 kg (80x200 cm)

NB: Care of Sweden reserves the right to modify the product specification at any time.

WARNING!

Follow the operation and maintenance instructions carefully in order to prevent physical injury, as well as damage to the product or other equipment.

9.2 Labelling

Labels on the mattress include product name, item number, date of manufacture, size, EAN number and care and washing instructions. The mattress also has labels for the top and bottom and head and foot ends, as well as space for your own marking (such as ward number and name).

9.3 Symbol key

Item number

Manufacturer

XXXX-XX-XX
Year-Month-Day

Foot placement

Read the user manual

Function group

CE-marked in accordance with MDD 93/42/EEC

Recycling

Do not dispose of with household waste; follow recycling instructions

Recommended user weight

User information – category

Placed directly on the bed base

Counteracts shearing

Heel function

Do not machine

Machine wash at 70°C

Machine wash at 95°C

<1%
Chlorine

Tumble dry

Do not tumble dry

Drip dry

Do not iron

Do not dry clean

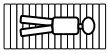
Wipe clean

Class II equipment (Double-insulated)

Type BF

IP code (ingress protection rating)

Temperature range


The mattress should be used with the user lying in the lengthwise direction

10. Spare parts

Item no.	Description	Size
CC-906010	Top part Olivia, grey	80x200 cm
CC-906011	Top part Olivia, grey	80x210 cm
CC-906012	Top part Olivia, grey	85x200 cm
CC-906013	Top part Olivia, grey	85x210 cm
CC-906014	Top part Olivia, grey	90x200 cm
CC-906015	Top part Olivia, grey	90x210 cm
CC-906016	Top part Olivia, grey	105x200 cm
CC-906017	Top part Olivia, grey	105x210 cm
CC-906018	Top part Olivia, grey	120x200 cm
CC-906019	Top part Olivia, grey	120x210 cm
CC-901410	Head cell, PU	80x15 cm
CC-901412	Head cell, PU	85x15 cm
CC-901414	Head cell, PU	90x15 cm
CC-901416	Head cell, PU	105x15 cm
CC-901418	Head cell, PU	120x15 cm
CC-901420	Heel cell, PU	80x13 cm
CC-901422	Heel cell, PU	85x13 cm
CC-901424	Heel cell, PU	90x13 cm
CC-901426	Heel cell, PU	105x13 cm
CC-901428	Heel cell, PU	120x13 cm
CC-901514	Safety cell, PU (for mattress width 80 cm)	75x60 cm
CC-901512	Safety cell, PU (for mattress width 85 cm)	80x60 cm
CC-901510	Safety cell, PU (for mattress width 90 cm)	85x60 cm
CC-901516	Safety cell, PU (for mattress width 105 cm)	100x60 cm
CC-901518	Safety cell, PU (for mattress width 120 cm)	115x60 cm
CC-901524	Safety cell, PU (for mattress width 80 cm)	75x80 cm
CC-901522	Safety cell, PU (for mattress width 85 cm)	80x80 cm
CC-901520	Safety cell, PU (for mattress width 90 cm)	85x80 cm
CC-901526	Safety cell, PU (for mattress width 105 cm)	100x80 cm
CC-901528	Safety cell, PU (for mattress width 120 cm)	115x80 cm
CC-901544	Safety cell, PU (for mattress width 80 cm)	75x70 cm
CC-901542	Safety cell, PU (for mattress width 85 cm)	80x70 cm
CC-901540	Safety cell, PU (for mattress width 90 cm)	85x70 cm
CC-901546	Safety cell, PU (for mattress width 105 cm)	100x70 cm
CC-901548	Safety cell, PU (for mattress width 120 cm)	115x70 cm
CC-400905	Pump for mattress width 80, 85, 90 cm	
CC-400906	Pump for mattress width 105, 120 cm	
CC-8217	Fuse (2-pack)	-

If other spare parts are required, please contact Care of Sweden.

11. Options and accessories

11.1 Options

Comfort fabric
For users who are very sensitive to alternating pressure a comfort fabric can be used, which further improves the comfort offered by the mattress.

Sheet holder
Helps keep the sheet in place. A clip for attaching to the cover; six per mattress.

11.2 Accessories

Comfort fabric, CuroCell

Item no.	Size
CC-907210	80x200 cm
CC-907211	80x210 cm
CC-907212	85x200 cm
CC-907213	85x210 cm
CC-907214	90x200 cm
CC-907215	90x210 cm
CC-907216	105x200 cm
CC-907217	105x210 cm
CC-907218	120x200 cm
CC-907219	120x210 cm

Sturdy transport bag

Item no.	Size
58-900909	80-120 cm

Sheet holder, each

Item no.	Size
CC-9075	-

Top part LF (low friction) - Top part with increased sliding function, can be used for heavy immobile patients.

11.3 Other accessories

To ensure the best level of comfort, we recommend the use of accessories from Care of Sweden since our products are designed to work well together. If you require any accessories, or for more information about our products, please contact Care of Sweden or visit our website – www.careofsweden.com.

12. Warranty

12.1 Scope

This CuroCell® system is covered by a 2-year warranty for manufacturing defects. The warranty does not apply to normal wear and tear or product impairment or damage stemming from negligence or improper handling/care.

12.2 Service and maintenance

The CuroCell® alternating pressure mattress is a medical device, in accordance with MDD 93/42/EEC, that is used to prevent and help treat pressure ulcers. For this reason, we recommend that the pump be regularly serviced and inspected to maintain functionality and performance. (See below for information on Annual Service.) Like other technical devices, a pump that is properly cared for works better and lasts longer.

At an Annual Service, the pump is thoroughly checked and serviced by our service department. Filters and consumables are cleaned or replaced as required. For more information, please contact Care of Sweden.

Service and maintenance must always be performed by Care of Sweden or one of its authorised service providers. Only use spare parts that have been approved by Care of Sweden. The use of non-approved spare parts invalidates the warranty.

Faults and defects regarded as warranty faults are rectified free of charge.

A warranty claim must be submitted to Care of Sweden before the product is returned.

12.3 Life expectance

This product's expected life is estimated to be 5 years.

13. Other information

13.1 Disassembly and recycling

Except for certain parts of the pumps, energy recovery is possible for almost all material in CuroCell® products through incineration at waste incineration facilities.

Pump:
A used CuroCell® pump must not be disassembled. Instead it should be taken to a recycling centre. The product is sorted as “electronic waste”.

Mattress:
A used CuroCell® mattress must be taken to a recycling centre. The product is sorted as “combustible waste”. Care of Sweden complies with its manufacturer responsibility through its affiliation with the REPA register and El-kretsen AB. For more information, please contact Care of Sweden.

13.2 Reconditioning – Service – Repairs

For service and repairs, contact Care of Sweden or one of its authorised service providers. Describe the fault/problem before returning the product.

Telephone number: Monday to Friday, 8am–4.30pm:	+46 (0)771-106 600
Fax:	+46 (0)325-128 40
E-mail:	service@careofsweden.se

13.2 Returns and warranty claims

Contact Care of Sweden **before** returning the product. The return postage will be paid by Care of Sweden if the fault is covered by the product warranty, otherwise by the customer.

Manufactured by

care of sweden
Supporting Life

Contact:

Telephone: +46 (0)771-106 600
Fax: +46 (0)325-128 40
E-mail: info@careofsweden.se
Internet: www.careofsweden.com

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SE-514 23 Tranemo
SWEDEN

Visiting address:

Fabriksgatan 5A
SE-514 33 Tranemo
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Deliveries address:

Byns väg 4A
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